

Serial No.: 10/735098
Group Art Unit No.: 1645

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-39 (Cancelled).

40. (Withdrawn): An isolated LbpB polypeptide selected from the group consisting of:
SEQ ID NO: 2, or a polypeptide having 80% identity over its entire length;
SEQ ID NO:4, or a polypeptide having 80% identity over its entire length;
SEQ ID NO:6, or a polypeptide having 80% identity over its entire length;
SEQ ID NO:8, or a polypeptide having 80% identity over its entire length; and
SEQ ID NO:10, or a polypeptide having 80% identity over its entire length.

41. (Withdrawn): The polypeptide of claim 40 which comprises the amino acid sequence of SEQ ID NO:2, 4, 6, 8, or 10, respectively, from amino acid position 19 to the C-terminus of the polypeptide.

42. (Withdrawn): A fragment of the polypeptide of claim 40, wherein the fragment retains an antigenic activity of the polypeptide, with the proviso that the fragments represented by amino acid position 650-725 of SEQ ID NO:2 and 559-741 of SEQ ID NO:6 are not included.

43. (Withdrawn): An antibody immunospecific for the LbpB polypeptide of claim 40.

44. (Withdrawn): A method for identifying compounds which inhibit the LbpB polypeptide of claim 40 which comprises:

- (a) contacting a candidate compound with cells which express the LbpB polypeptide; and
- (b) observing the binding, or inhibition of a functional response; or comparing the ability of the cells which were contacted with the candidate compounds with the same cells which were not contacted for LbpB polypeptide activity.

45. (Withdrawn): A vaccine comprising an effective amount of the polypeptide of claim 40 and a pharmaceutically acceptable carrier.

46. (Withdrawn): A vaccine comprising an effective amount of a protein comprising a fragment of the polypeptide of claim 42 and a pharmaceutically acceptable carrier, wherein the fragment retains an antigenic activity of the polypeptide.

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47. (New): The vaccine according to claim 45 wherein said composition comprises at least one other *N. meningitidis* antigen.

48. (Withdrawn): The vaccine according to claim 46 wherein said composition comprises at least one other *N. meningitidis* antigen.

49. (Withdrawn): A method for vaccinating a human against neisserial disease comprising administering to said human a composition comprising an effective amount of the polypeptide, fragment or protein of claim 40.

50. (Withdrawn): A method for vaccinating a human against neisserial disease comprising administering to said human a composition comprising an effective amount of the polynucleotide of claim 35.

51. (Withdrawn): A method for diagnosing neisserial disease in a human comprising the steps of incubating an antibody produced by administering to a suitable human or animal the polypeptide of claim 40 with a sample of biological fluids from a human to be diagnosed, wherein in the presence of neisserial bacteria an antigen-antibody complex is formed, and subsequently analysing said fluid sample for the presence of said complex.

52. (Withdrawn): A therapeutic composition useful in treating humans with neisserial disease comprising at least one antibody directed against the polypeptide of claim 40 and a suitable pharmaceutical carrier.

53. Cancelled.

54. (Withdrawn): A kit for diagnosing infection with neisserial bacteria in a human comprising a polypeptide, fragment or protein of claim 40.

55. (Withdrawn): A kit for diagnosing infection with neisserial bacteria in a human comprising an antibody of claim 43.

56. (Previously Presented): An isolated polynucleotide comprising the nucleotide sequence contained in SEQ ID NO: 1 (from nucleotide 100 to nucleotide 2274); SEQ ID NO:3; SEQ ID NO:5; SEQ ID NO:7; or SEQ ID NO:9.

57. (Previously Presented) An isolated polynucleotide comprising a polynucleotide encoding the polypeptide of SEQ ID NO:2, 4, 6, 8 or 10.

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58. (Canceled)

59. (Currently amended) A recombinant expression system comprising the polynucleotide of claim 56[,] ~~or 57, or 58~~ wherein said expression system is capable of producing a polypeptide of SEQ ID NO:2, 4, 6, 8 or 10; ~~or a polypeptide which is at least 16 contiguous amino acids in the polypeptide of SEQ ID NO:2, 4, 6, 8 or 10~~ in a compatible host cell.

60. (Previously presented): A host cell comprising the expression system of claim 59.

61. (Currently amended): A process for producing a polypeptide ID NO:2, 4, 6, 8 or 10; ~~or a polypeptide which is at least 16 contiguous amino acids in the polypeptide of SEQ ID NO:2, 4, 6, 8 or 10~~ in a compatible host cell, comprising culturing the host cell of claim 60 under conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture.

62. (Currently amended): A process for producing a cell which produces a polypeptide ID NO:2, 4, 6, 8 or 10; ~~or a polypeptide which is at least 16 contiguous amino acids in the polypeptide of SEQ ID NO:2, 4, 6, 8 or 10~~ in a compatible host cell thereof comprising transforming or transfecting a host cell with the expression system of claim 59 such that the host cell, under appropriate culture conditions, produces the polypeptide.

63 (Currently Amended) A kit for diagnosing infection with neisserial bacteria in a human comprising an isolated polynucleotide of claim 56[,] ~~or 57, or 58~~.

64. (New): An isolated polynucleotide having at least 90% identity to a polynucleotide sequence of SEQ ID NO: 1 (from nucleotide 100 to nucleotide 2274), SEQ ID NO:3; SEQ ID NO:5, SEQ ID NO:7, or SEQ ID NO:9; whereby said isolated polynucleotide can detect an *N. meningitidis* DNA under stringent hybridization conditions, in which the stringent conditions are defined as overnight incubation at 42°C in a solution comprising: 50% formamide, 5xSSC (150mM NaCl, 15mM trisodium citrate), 50 mM sodium phosphate (pH7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 microgram/ml denatured, sheared salmon sperm DNA, followed by washing in 0.1xSSC at about 65°C.